TUBERCULOSIS IN LOS ANGELES*

A JOINT HEALTH DEPARTMENT AND TUBERCULOSIS ASSOCIATION STUDY IN ORGANIZING FACTS FOR PROGRAM PLANNING

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THE Los Angeles City Health Department and the Los Angeles Tuberculosis and Health Association have for some time been studying the tuberculosis problem, as it exists in our city, with a view to a better use of available facilities. We have just completed, for example, a study of tuberculosis in Los Angeles for the years 1942 and 1943, with special reference to answering the questions (1) Where is our tuberculosis problem? (2) Who is finding tuberculosis and who is failing to find it?; and (3) In what groups do we need to intensify our tuberculosis program?

I. WHERE IS OUR TUBERCULOSIS PROBLEM?

Tuberculosis still exists in all parts of the city. The rates are the lowest in West Los Angeles, Eagle Rock, Highland Park, the Wilshire area, and the Southwest or Adams section of the city. In these areas there is reported an average of approximately 70 tuberculosis cases per 100,000 population.

Other areas with moderate rates, of less than 100 cases per 100,000 population, are Hollywood, San Pedro-Wilmington and San Fernando Valley.

The Southeast area has a high rate, approximately 160 cases per 100,000 population. The highest rates, 250 per 100,000, are reported for the Central and East areas. There are many cheap rooming houses in these areas, as well as much overcrowded substandard housing.

In the Central area the majority of cases (71 per cent) occur in the white population. In the East area, the Mexican problem is introduced. Thirty-seven per cent of the cases here occur among Mexicans and only 34 per cent occur in the white population. The Southeast area includes the Negro section of the city, and 45 per cent of the cases in this area occur among Negroes. The only other areas in which race must be considered is the San Pedro and Wilmington area, where 26 per cent of the cases have occurred among Mexicans.

It is realized that housing, sanitation, and susceptibility are important factors in the spread of disease among the Negroes and Mexicans. We feel, however, that these groups deserve special attention, and special study by individuals who understand their special problems.

II. WHO IS FINDING TUBERCULOSIS AND WHO IS FAILING TO FIND IT?

Only 24 per cent of cases coming to the attention of the Los Angeles City Health Department are reported by private physicians. It is interesting to note the relative number of cases reported by doctors of medicine, doctors of osteopathy, and doctors of chiropractics. Approximately 16 cases per 100 medical doctors per year are reported to Los Angeles City Health Department; only 7 cases per 100 per year were reported by osteopaths; and 2 cases per 100 by chiropractors.

Eighteen per cent of Los Angeles tuberculosis is reported first by the Los Angeles County General Hospital. In a great many of these cases the diagnosis has been made before the patient is sent to the hospital.

Twenty-six per cent of the cases are reported for the first time by the Los Angeles City Health Department. These cases were referred to the health department for examination by various sources. In spite of the fact that tuberculosis is required by State law to be reported by physicians on the original report forms, in 1942-43 more than one-eighth of the resident cases were reported by death certificates only. The balance of the cases were reported by the tuberculosis association clinic, school clinic, and other clinics and sanatoria. For Los Angeles City last year, only 16.8 per cent of the cases were discovered in the minimal stage. Private physicians reported a bare fraction above twenty per cent as minimal.

III. IN WHAT GROUPS DO WE NEED TO INTENSIFY OUR TUBERCULOSIS CONTROL EFFORTS?

Tuberculosis in adolescents and young adults is often thought of as being a fairly rapid, or acute type of tuberculosis, with exudative lesions predominating. Among older people the lesions are usually considered more likely to be of a fibroid type, with low-grade activity and developing more slowly. It would thus seem that minimal tuberculosis should be discovered more easily among older people than among younger people. This may be true, but the fact remains: In Los Angeles at least, minimal active tuberculosis is often reported among young people, but it is rarely reported among older people.

The available clinical evidence indicates that tuberculosis progresses more rapidly among Negroes than among whites. Thus it would seem reasonable that tuberculosis should be more frequently reported prior to death in whites than in Negroes. Just the opposite, however, was found to be true. Only 27 per cent of the Negro tuberculosis deaths were unreported at death in 1943, whereas 48 per cent of the white deaths were not reported.

It would seem from these figures that our efforts in locating tuberculosis in young people and non-whites have yielded results. It follows then that, while our efforts must not be discontinued in these two groups, they must be ex-

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tended to the older age groups, especially in the white population.

Of all tuberculosis deaths in Los Angeles City, approximately 40 per cent had never been reported as cases to the City of Los Angeles, insofar as could be determined from a search of the files.

SUMMARY

To review the facts on Los Angeles, different areas of the city vary in incidence from 50 to 250 cases per 100,000 population. Forty per cent of Los Angeles tuberculosis deaths are never reported as cases. Only 27 per cent of Negro tuberculosis deaths in 1943 were not reported as cases prior to death, whereas 48 per cent of white deaths were not reported. Only 20 per cent of tuberculosis cases are reported by private physicians. Only 16.8 per cent of cases were discovered in the minimal stage. M. D.'s reported 16 cases per 100 physicians per year; osteopaths 7 per 100 per year; chiropractors 2 per 100 per year. More than twice as many older adults were not reported prior to death, as young adults.

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PROBLEM OF TUBERCULOSIS IN CALIFORNIA STATE HOSPITALS*

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THE problem of tuberculosis in hospitals for the insane and for the mentally deficient has long been recognized. Year after year, mortality statistics demonstrate that death rates within such institutions are many times as high as in the general population. In the United States about 5 per cent of all tuberculosis deaths occur in mental hospitals.

The California Health and Safety Code recognizes the problem by listing specifically amongst the functions of the Bureau of Tuberculosis the advising of officers of State institutions regarding the proper care of tuberculous inmates. In the 10 California mental hospitals, the statistics in regard to tuberculosis deaths speak for themselves. One hundred sixty-three patients died there of tuberculosis during the fiscal year 1942-43, out of an inmate population of 28,258 (as of June 30, 1942), giving a rate of 577, in contrast to the California rate of 50.9 for the year 1942. For the two types of institutions, the rate is 609 for the mental hospitals and 409 for the mentally deficient hospitals. The true rates are higher than these, since some of the patients, especially in the more deteriorated categories, die of tuberculosis without diagnosis.

CONTROL PROGRAM STARTED 13 YEARS AGO

The first beginnings of a modern control program were made by Dr. Fred O. Butler at the Sonoma State Home 13 years ago. X-ray films of each new admission, supplemented by segregation of infectious patients in separate buildings, were the pillars of his program. In 1939 two of the hospitals, Napa and Patton, were designated as central depots for the patients, whither diagnosed cases were to be sent from the institutions of the north and south respectively. Plans for new buildings for the tuberculous were drawn up, and the buildings at Patton were completed and have been used for this purpose for some time. Construction at Napa was delayed by the war, and when the building was completed, it was turned over for the duration to the Navy for psychiatric patients. The tuberculosis patients there remain in the old isolation wards. At Napa, Patton, and Sonoma at present there are 600 patients in buildings specially for tuberculosis, a total greater than the capacity of any tuberculosis sanatorium in California except Olive View.

The most extensive survey in State hospitals has been done in New York by the combined efforts of the New York State Department of Mental Hygiene and the New York State Department of Health, under the leadership of Dr. Robert E. Plunkett. In a preliminary study at the Newark State School for Mental Defectives, made in 1936, Dr. Plunkett found that 90 per cent of the patients over the age of 30 were positive to tuberculin. At that institution, with few discharges and close contact between patients, it was demonstrated that every case of reinfection-type tuberculosis, which developed during residence in the institution, could be associated with the presence of another infectious case in its immediate environment. On the other hand, among inmates who at no time were associated intramurally and intimately with a patient with open tuberculosis, not one case of reinfection type tuberculosis developed.

INTRAMURAL SPREAD OF TUBERCULOSIS

In 1938 it was discovered that, of all the patients on the tuberculosis register of Seneca County, New York, 23 per cent were or had been employed at the Willard State Hospital, which was located in the county, and that, in the preceding twenty-four months, 11 new cases of active tuberculosis had been reported amongst employees of that institution. This led to a thorough survey at Willard, which showed that of 3,407 patients, 76 (2.2 per cent) had active tuberculosis, 157 (4.6 per cent) had probably inactive reinfection tuberculosis, and 100 (3.2 per cent) had healed reinfection tuberculosis, or a total of 10 per cent had x-ray evidence of present or past adult type tuberculosis. In addition to this, 10.3 per cent had calcifications. Yet among 587 admitted in the year of the survey, only 3 per cent had reinfection tuberculosis. This demonstrated the tremendous rate of intramural spread of the disease. Two years later, all the patients were

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